PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P36737P0-540	FOR FURTHER ACTION	See Form PCT/IPEA/416				
International application No.	International filing date (day/month/y	ear) Priority date (day/month/year)				
PCT/JP2004/018927	17.12.2004	18.12.2003				
International Patent Classification (IPC) or national classification and IPC						
H01L27/14, H01L31/02, H04N5/335						
Applicant						
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.						
This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.						
2. This REPORT consists of a total of						
3. This report is also accompanied by A		•				
a. (sent to the applicant and	to the International Rureau) a total of	7 sheets, as follows:				
, , , , , , , , , , , , , , , , , , , ,	a. (sent to the applicant and to the International Bureau) a total of 7 sheets, as follows: sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or					
sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).						
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental						
Box.	D					
b. (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s))						
related theyete, in computar	roadable form only as indicated in t	, containing a sequence listing and/or tables				
related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).						
4. This report contains indications relati	ng to the following items:					
Box No. I Basis of the	Box No. I Basis of the report					
Box No. II Priority						
Box No. III Non-establi	shment of opinion with regard to nove	ty, inventive step and industrial applicability				
Box No. IV Lack of unit	Box No. IV Lack of unity of invention					
DON THE !	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Box No. VI Certain doc	uments cited					
Box No. VII Certain defe	ects in the international application					
Box No. VIII Certain obse	Box No. VIII Certain observations on the international application					
Date of submission of the demand	Date of comple	Date of completion of this report				
		-				
Name and mailing address of the IPEA/JP	Authorized off	Authorized officer				
Facsimile No.	Telephone No.					

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018927

Box	No. I	I Basis of the report				
1.	 With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item. 					
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of: international search (Rule 12.3 and 23.1(b)) publication of the international application (Rule 12.4) international preliminary examination (Rule 55.2 and/or 55.3)					
2.	rece	regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the ving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to report): the international application as originally filed/furnished the description: pages 1-38 as originally filed/furnished				
		pages 1-38 pages*				
		pages*	_	_		
	\square		_ received by this Admoraly on			
		the claims:		and simplify file 4/forming and		
		nos. 9,10,12		as originally filed/furnished		
		nos.* 8,11,15,17-19,33				
	\square	nos.*	_ received by this Admorary on			
		the drawings:				
		sheets Fig. 1-32		as originally filed/furnished		
		sheets*	-			
		sheets*	received by this Authority on			
		a sequence listing and/or any related table(s) – see Supplen	equence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.			
3.	\boxtimes	The amendments have resulted in the cancellation of:	e amendments have resulted in the cancellation of:			
		the description, pages	the description, pages			
		the claims, nos. 1-7,13,14,16,20-32	the claims, nos. 1-7,13,14,16,20-32			
		the drawings, sheets/figs	the drawings, sheets/figs			
		the sequence listing (specify):				
		any table(s) related to sequence listing (specify):				
4.		This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi				
		the description, pages				
		the claims, nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any table(s) related to sequence listing (specify):				
*	If ite	em 4 applies, some or all of those sheets may be marked "sup	erseded."			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

PCT/JP2004/018927

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement 1. Statement Novelty (N) Claims 8-12, 15, 17-19, 33 Claims Inventive step (IS) Claims 12, 19 Claims 8-11, 15, 17, 18, 33 Industrial applicability (IA) Claims 8-12, 15, 17-19, 33 2. Citations and explanations (Rule 70.7) Document 1: JP 2003-116066 A (Sony Corporation), 18 April 2003, entire text; fig. 1 and 5 & US 2003/80434 A1 Document 2: JP 2002-329850 A (Canon Inc.), 15 November 2002, entire text; fig. 1 and fig. 4 to 13 Document 3: JP 2000-286401 A (Miyota KK), 13 October 2000, entire text; fig. 3 to 6 Document 4: JP 9-69618 A (Sony Corporation), 11 March 1997, paragraphs [0015] and [0016]; fig. 1 Document 5: JP 2003-303947 A (Sony Corporation), 24 October 2003, paragraph [0005], [0020]; fig. 6 and fig. 12 Document 6: JP 11-74496 A (Sharp Corporation), 16 March 1999, paragraphs [0008] to [0016]; fig. 7 to 11 Document 7: JP 5-326904 A (Japan Synthetic Rubber Co., Ltd.), 10 December 1993, paragraphs [0001], [0002], [0035] and [0039] Document 8: JP 2003-347529 A (Fuji Photo Film Co., Ltd.), 5 December 2003, paragraphs [0020] to [0048]; fig. 1 to 3 & US 2004/77121 A1 The invention set forth in claims 8 and 9 does not

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

involve an inventive step in the light of document 1, documents 2, 3 or 6, and documents 4 and 5.

Documents 2, 3 and 6 set forth a feature wherein a transparent protective plate has a skirt part around its outer peripheral edge.

A solid-state imaging device which is cut into individual devices after a transparent protective plate has been fitted is set forth in document 1 (paragraphs [0020] to [0020], etc.) and document 2 (paragraphs [0014], etc.).

Document 2 (paragraph [0018]) indicates that plated bumps are used as the metal protrusions 223.

The invention set forth in claim 10 does not involve an inventive step in the light of documents 1, 2, 4 and document 5, and documents 6 and 7.

Documents 2, 3 and 6 set forth a feature wherein a transparent protective plate has a skirt part around its outer peripheral edge.

A solid-state imaging device which is cut into individual devices after a transparent protective plate has been fitted is set forth in document 1 (paragraphs [0020] to [0020], etc.) and document 2 (paragraphs [0014], etc.).

Document 6 sets forth a cap comprising transparent resin formed in a bathtub-shape, and document 7 indicates that a CCD lid is formed using press-molding.

The inventions set forth in claims 11 and 33 do not involve an inventive step in the light of documents 1, 2, 4 and 5.

With regard to the feature wherein a light-receiving chip has a rib part, and the feature wherein the rib part is prepared in the process of generating a semiconductor, Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

take note that document 2 (paragraph [0018]) indicates that the metal protrusions (223) may also be provided on the IC electrode 1c.

A solid-state imaging device which is cut into individual devices after a transparent protective plate has been fitted is set forth in document 1 (paragraphs [0020] to [0022], etc.) and document 2 (paragraph [0014], etc.).

The inventions set forth in claims 15, 17 and 18 do not involve an inventive step in the light of documents 1, 2, 4 and 5, and document 8.

Document 8 sets forth an invention wherein conductive paste is used in through holes 208 formed in a glass substrate 201 to form a conductive layer, and a bonding pad 210 is formed on the upper surface of said glass substrate. Document 8 also sets forth a feature wherein the solid-state capture element substrate 100 comprises a silicon substrate 101, and a bonding pad BP is formed on the silicon substrate 101.

A solid-state imaging device which is cut into individual devices after a transparent protective plate has been fitted is set forth in document 1 (paragraphs [0020] to [0022], etc.) and document 2 (paragraph [0014], etc.).

The feature of the invention set forth in claim 12, wherein "the aforementioned light-receiving chip has a rib part formed of an insulating substance of the same material as the protective film on the aforementioned outer peripheral region", and the feature of the invention set forth in claim 19, wherein "the aforementioned conductive member comprises a conductive

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/018927

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film deposited on the surface extending from one principal surface via the side surface to the other principal surface of the aforementioned transparent protective plate", are not disclosed in any of the documents cited in the international search report, and the inventions set forth in claims 12 and 19 would not be obvious to a person skilled in the art. (However, with regard to the invention set forth in claim 19, the term "conductive member" does not appear before the wording "the aforementioned conductive member", therefore "the aforementioned conductive member" is unclear, and the connections between the electrodes and the terminal pad are unclear.